Message

From: Harry Hendler [Hendler.Harry@azdeq.gov]

Sent: 3/4/2015 10:31:22 PM

To: d'Almeida, Carolyn K. [dAlmeida.Carolyn@epa.gov]; Wayne Miller [Miller.Wayne@azdeq.gov]

CC: Davis, Eva [Davis.Eva@epa.gov]; Henning, Loren [Henning.Loren@epa.gov]

Subject: RE: 2015-3-4 - wafb - LNAPL migration - ST012 - HHendler comments -

Thanks Carolyn,

We are not debating the current implemented remedy west of Sossaman. I believe we need to have a discussion on the new threat east of Sossaman. Let's try and hook up next week.

Thanks

HRH

Arizona Department of Environmental Quality (602) 771-4609

From: d'Almeida, Carolyn K. [mailto:dAlmeida.Carolyn@epa.gov]

Sent: Wednesday, March 04, 2015 3:10 PM

To: Wayne Miller

Cc: Davis, Eva; Harry Hendler; Henning, Loren

Subject: RE: 2015-3-4 - wafb - LNAPL migration - ST012 - HHendler comments -

Wayne/ Harry

The original ROD for OU2 called for pump and treat to drinking water standards. The 2013 ROD Amendment only changed the remedy, the RAOs didn't change. AF is implementing the remedy we all selected together. There will be bioremediation to address what is left behind once steam is done. There will certainly be grounds for a reopener If they still haven't met the RAOs in the RODA as stated on page 34:

to prevent exposure to contaminants in water exceeding drinking water standards,

- to prevent exposure to contaminants in water at concentrations exceeding 1x10-6 to 10-4 Incremental Lifetime Cancer Risk (ILCR) or a Hazard Index (HI) greater than 1 when a drinking water standard is not established, and
- to restore the aquifer to drinking water and aquifer water quality standards.

From: Wayne Miller [mailto:Miller.Wayne@azdeq.gov]

Sent: Wednesday, March 04, 2015 1:37 PM

To: d'Almeida, Carolyn K.

Subject: 2015-3-4 - wafb - LNAPL migration - ST012 - HHendler comments -

Carolyn, Eva – Below are comments Harry Hendler, ADEQ Federal Projects Unit Manager was drafting. ADEQ is willing to let the process move forward, but has reservations that the current remedy will meet all CERCLA clean up criteria. Management wants to engage EPA in discussion in the event that the ST012 remedy is not as complete as hoped.

Thank you Eva and Carolyn,

When and how the LNAPL got across Sossaman may never be resolved. The temperature being a tracer may or may not be appropriate because the groundwater will be influenced by the introduced pressure and thus the temperature will be more of a lag measure. Especially since the injection wells are on the outside versus being in the interior. I would think the WL would be a better lead measure.

The main concern for the state is that the contamination footprint is much larger than before. Not just the dissolved portion, but the LNAPL portion. When we started the TEE, we had an estimated extent of the dissolved plume west of Sossaman. Now the dissolved plume has move further east that may have been due to the system shut down in preparation for the SEE. But having LNAPL east of Sossaman is not acceptable.

All this can and will be debated. The new problem now is how to deal with the LNAPL east of Sossaman. We need to start discussing how to prevent further migration of the plume to the east as well as now treating a LNAPL plume outside the original footprint of ST-012.

Thanks

HRH Arizona Department of Environmental Quality (602) 771-4609

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